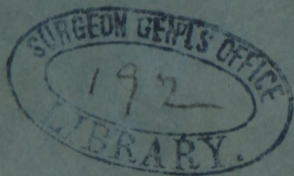


MORTON (W.T.G.) &  
WHITMAN (FR)

**MORTON**

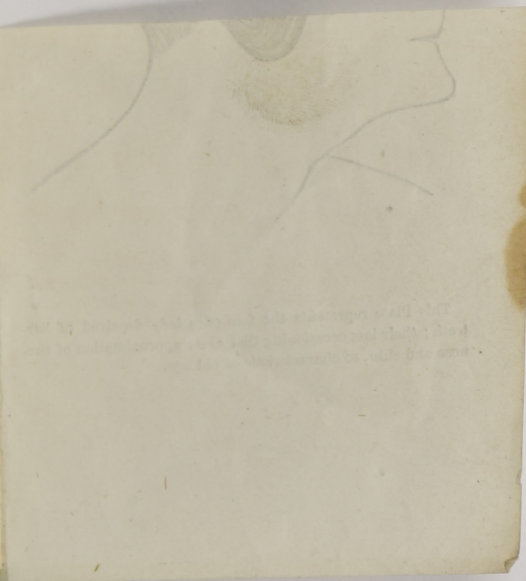
ON THE

**LOSS OF THE TEETH.**





This Plate represents the same face restored to its original and youthful appearance, by the aid of artificial teeth, as supplied by W. T. G. MORTON, author of "Morton on the Inhalation of Ether," "Voice from Europe," &c.





This Plate represents the face of a lady deprived of her teeth; their loss occasioning that close approximation of the nose and chin, so characteristic of old age.

ON THE

# LOSS OF THE TEETH,

AND THE

MODERN WAY OF RESTORING THEM,

AS PRACTISED BY

W. T. G. MORTON

AND

FRANCIS WHITMAN,

SURGEON DENTISTS, No. 19 TREMONT ROW,

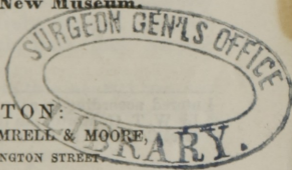
Opposite the New Museum.

BOSTON:

PRINTED BY DAMRELL & MOORE,

No. 52 WASHINGTON STREET.

1847.



Mon. Med.

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1847

THE Author of this work — being aware that the short visits which are occasionally made, when professional assistance is required, do not afford much opportunity for inquiry or advice — has prepared this little manual, with a view of its being at hand, to be referred to at leisure.

The explanations given have been purposely rendered familiar, to enable the reader to form his own opinion on the subjects treated of.

Where the sentiments of foreign writers have appeared, founded on just observation, he has willingly adopted them; and, in doing so, has not scrupled occasionally to borrow their language.

See Appendix.

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Entered according to act of Congress, in the year 1847,  
by W. T. G. Morton, in the Clerk's Office of the District Court of the District of Massachusetts.

ON THE  
LOSS OF TEETH.

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THERE are not any of the "ills to which flesh is heir to," more excruciating or intolerable, or which so completely incapacitates a person for business or pleasure, as the Tooth-ache.

It most frequently happens that the majority of persons who are actively engaged pay little attention to their teeth, until they become painful.

The evils arising from this neglect are, too frequently, the loss of many, or, in *some cases*, *all the teeth*; which, by an early visit to the Dentist, might have been prevented.

## VALUE AND IMPORTANCE OF THE TEETH.

The teeth influence the form and expression of the countenance much more than is generally imagined ; and the finest face is disfigured if the teeth are irregular, and a disagreeable impression is produced.

Where the teeth are good, there is, when speaking or smiling especially, a fascination present, which prevents further examination of the countenance.

It is therefore evident that much of the beauty of the countenance depends upon a happy and regular disposition of the teeth.

If the countenance of youth and age are compared, the great difference will be found in the alteration of the mouth.

*When the teeth are lost, the nose and chin approximate, the cheeks become hollow and shrunk, the lips thin and contracted, thus giving an appearance of premature old age.*

Good teeth are not only indispensable to personal beauty, but on their regularity depends perfect articulation.

The most striking cases are those persons about the middle periods of life, who have lost their teeth ; for, however clear and perfect their utterance may have been before their

loss, it is impossible to regain it without supplying the deficiency by means of artificial teeth.

The most important use of the teeth is mastication of the food, previous to its being received into the stomach. The distressing sensations arising from imperfectly masticated food must immediately convince every one of their importance in this first step towards good digestion, and of the paramount necessity of possessing teeth, either natural or artificial, as the means of retaining health.

How valuable, then, are regular and sound teeth, contributing so much beauty and expression, even to the finest face!

Can more important or urgent reasons be required to enforce an immediate attention to their preservation?

Many persons habitually neglect their teeth, and, from having long seen them discolored, imagine that they are decayed or corroded beyond all recovery. This is frequently a mistaken notion, as, by a visit to the Dentist, that discoloration may be removed without the least injury to the teeth, and they will again appear of their natural color.

If persons foresaw the consequences of this neglect, they would no doubt act differently. The accumulation of tartar very soon produces

a gradual loosening of the teeth, which, almost imperceptibly, although surely, undermines them, and ends in the successive loss of the whole of them.

To preserve the teeth of a fine pearly whiteness, and retain them firm in their sockets, it is necessary to observe strict cleanliness of the mouth, by the use of proper tooth brushes, morning and evening, with tepid water, and occasionally to use tooth powder.

---

### LOOSE TEETH.

This is a state of the teeth which prevails to a great extent, and more generally among persons about the middle periods of life ; especially those who have resided in India, or other warm climates.

Having devoted much time and study to this particular department of dentistry, I have succeeded beyond my most sanguine expectations, in applying A NEW PRINCIPLE for arresting this very prevalent and most destructive state of the gums and teeth ; by which means teeth that are very loose, and apparently likely to fall out of their sockets, may be rendered firm, and retained for many years.

## SCALING THE TEETH

Is highly necessary, and of great value in their preservation, wherever there is any tartar accumulated, which is generally the case if the teeth have been neglected from any cause.

Many persons fear to apply to the Dentist for this purpose, under an erroneous impression that they have to undergo some painful operation. This is not the case: if skilfully performed, the pain is so trifling as to be unworthy of regard of even the most sensitive.

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## PRESERVING THE TEETH BY STOPPING OR PLUGGING THEM.

When decay, or caries, makes its appearance in a tooth, HOWEVER SMALL THE APERTURE MAY BE, IT SHOULD BE FILLED WITHOUT DELAY. It is a great error to postpone this until the tooth is painful, as the earlier the teeth are stopped, the more successful will be the result, and the greater number of years will the tooth or teeth be preserved.

The progress of decay is entirely arrested, and the tooth saved, by stopping the hollow

with a preparation which excludes the air and prevents foulness, or the pain and irritation occasioned by food lodging in it. By the beautiful and useful operation of stopping or plugging teeth, which are greatly injured by caries, they may be preserved for many years; in most instances *during the remainder of life*; and frequently from ten to twenty teeth may be preserved by this means, in the same individual.

The commencement and progress of decay is so insensible, that it may exist many years; and even the person himself is often not aware of it till it has penetrated the very centre of the tooth. Having reached the cavity, it there commands attention, on account of the severe toothache it occasions.

Of the various operations required for preserving carious teeth, and arresting all further progress of decay, stopping, therefore, takes the foremost place.

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#### EXTRACTION OF TEETH.

The extraction of a double tooth is a more serious loss than is generally supposed.

How few people formerly arrived at the age

of twenty, without experiencing the dreadful effects of extraction !

When a large grinder is extracted, its opponent in the other jaw becomes, to a certain extent, useless ; and whenever several of the grinders have been extracted, the remaining teeth, becoming useless, from being deprived of their antagonists, compel mastication to be performed with the front teeth.

When this is the case, the individual will speedily be deprived of all the remaining teeth, which either decay rapidly, by having their posterior surfaces ground away by the sharp edges of those in the lower jaw, or become loose in consequence of the sockets being absorbed by incessant irritation, and ultimately drop out.

It may be readily understood how, in the absence of double teeth, an undue pressure falls on the front or single ones, every time the mouth is shut. The front teeth of the under jaw rubbing forcibly against those of the upper, grind down, by attrition, or loosen each other.

The proper and *only remedy* for this state of affairs, is to *fill up, by artificial means*, the ravages of time, of heedlessness, and *tooth drawing* ; thereby *restoring* clear articulation, perfect mastication, and PREVENTING THAT AP-

PROXIMATION OF THE NOSE AND CHIN, THE HOLLOW AND SHRUNKEN CHEEKS, THE THIN AND CONTRACTED LIP, SO CHARACTERISTIC OF OLD AGE.

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### REGULATION OF TEETH.

The author has lately contrived a new and novel instrument for the regulation of teeth, which, he thinks, will be admirably adapted to this too much-neglected branch of the profession.

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### TOOTH POWDERS AND TINCTURES.

If the teeth are kept constantly cleaned, and thus preserved in a healthy state, tooth powders and tinctures will be but little needed: when they are, persons should be careful what they use. Some tooth powders will make the teeth look beautifully white for a time; after which they will become brown, or nearly black, the ingredients employed destroying the enamel. Tooth powders should have no acid, and be composed only of tonic and cleansing ingredients. Prepared chalk is sometimes used, and chalk combined with camphor,

which is, in some cases, to be preferred. Bark and myrrh, with a little very finely powdered cuttle fish, are good; and so are equal parts of bark, myrrh, orris root, and gum mastich, which last gives a tenacity to the powder, and renders it more effective.

Tinctures are as various as tooth powders. Pure spirit (spirit of wine) is the basis of them all, and an excellent antiseptic it is. It may be used either alone, or combined with tonics; but, as in tooth powders, those tinctures which are recommended for whitening the teeth should be scrupulously avoided; for no tooth powder or tincture can do this in the manner stated, without at the same time laying the foundation for their gradual destruction. Tinctures may be either stimulant or tonic, or both. Tincture of myrrh alone is good, or with a little camphorated spirit, in the proportion of a drachm to an ounce, or tincture of myrrh and bark, equal parts; tincture of rhatany with lavender, cinnamon, guaiacum, and many others, have at different times been recommended, most of which, from the small quantities used, owe their efficacy more, perhaps, to the spirit which is the basis of them all, than to their extrinsic qualities. Those who prefer tooth powders or tinctures, ready prepared, may obtain such as he recommends, at the author's rooms.

## OF ARTIFICIAL TEETH.

The art of supplying lost teeth so as satisfactorily to answer all the purposes of natural ones, and at the same time not only without doing injury, but to give support to and preserve those that remain, was very imperfectly understood until late years.

The very great perfection which this art has now attained would scarcely be believed by those who are not familiar with the subject.

Either partial or entire sets of teeth, scientifically designed, and skilfully adapted, may be worn with the greatest ease and satisfaction; but, on the contrary, those that are ill made and unskilfully adapted are troublesome to the wearer, an impediment to speech and mastication, and even a greater blemish to the countenance than the want of teeth; *those that are well adapted, are, on the contrary, easy, useful, and highly ornamental.*

In the construction of artificial teeth, utility and comfort, as much as appearance, ought to be considered by the Dentist. The latter refers to the successful imitation of nature, in the form, color, and proportions of the teeth, and especially in the shape and expression of the mouth.

THE ATTENTION OF THOSE WHO REQUIRE

ARTIFICIAL TEETH, IS ESPECIALLY DIRECTED TO THE FOLLOWING OBSERVATIONS :

The *extraction* of the few teeth or roots which it may be necessary to remove, previously to taking a model of the mouth for the purpose of preparing artificial teeth, can be accomplished by the employment of the author's discovery for the annihilation of pain in surgical operations, child-birth, &c., &c. For further information upon the latter subject, the reader is referred to the author's works, "Morton on the Inhalation of Ether," and "Voice from Europe," for sale by booksellers generally — and to opinions of the press in the appendix of this Manual.

From one to a complete set can be fitted in the mouth, with the greatest accuracy and precision, answering most fully every purpose of articulation and mastication ; and so perfectly natural in appearance as to defy detection by the closest observer, *without giving any pain whatever.*

Whenever a partial loss of the double teeth has occurred, painful or uneasy sensations are experienced in the front teeth ; these are warnings of the destruction about to ensue.

The front teeth separate, afterwards take irregular positions, projecting outwards, or inclining inwards, and soon become loose.

By filling up the spaces left by the lost double teeth with artificial ones, and lengthening the grinding surfaces of those remaining in the mouth, such defects are obviated.

To effect this, much labor and skill are required; but, when accomplished, it restores the mouth to a state equal to the natural one, and renders the patient easy and comfortable.

Ligatures should never be used to fasten artificial teeth; they should be so constructed as to be removed as easy as a glove, and yet be perfectly secure and steady in the mouth; objects which can only be obtained by a Dentist who perfectly understands his profession.

In all cases, very great accuracy of fitting to the model, and a correct adaptation to the mouth, is necessary.

In cases where there is absorption or loss of substance, a very great change takes place in the appearance and expression of the countenance.

*See the Engraving.*

This absorption occurs more or less in all cases; and to ascertain the exact extent of such loss of substance is very important previous to supplying artificial teeth; as, by a judicious arrangement of the material, in making good such losses with artificial gum as well as teeth, where the loss is considerable, depends

that perfect restoration of the features to their natural symmetry, which the art of Dentistry is capable of giving.

By attention to the above, any degree of fullness of the lips or cheeks can be obtained, without inconvenience to the wearer.

Much has been said with respect to the comparative merits of bone or gold, as the frame for artificial teeth; some Dentists using bone in every case, however inapplicable; others using gold.

The author has important reasons for giving a preference to gold in most cases.

Ivory, or the tusk of the Hippopotamus, soon decomposes, and, notwithstanding the greatest care and cleanliness, will not last long.

As it is in all cases desirable to place as *little in the mouth as possible*, that the articulation and mastication may be performed with more freedom.

Gold of the finest quality can be used with the greatest advantage, as it may be thin and small in size, and yet possess infinitely more durability than ivory, which, when made thin, is very soon destroyed, and therefore, from the necessity of frequently renewing it, becomes expensive.

The teeth that are usually supplied by Dentists, are either natural or mineral.

Natural teeth have been long employed by the most celebrated Dentists, and with great success as regards appearance and utility; but with respect to their durability, the time they will last varies according to the constitution of the wearer, notwithstanding their handsome appearance when first placed in the mouth.

Conscious of how much remained to be accomplished, in order to render my artificial work superior to my predecessors, I was induced to direct my early attention to this particular branch; and the result of several years' close application is that I am now enabled to manufacture and set *Teeth*, composed of silicious substances, with a very fine enamel upon them, which admits of every variety of shade and color, and enables me to match with the greatest nicety, both in *form* and *color*, any teeth that may remain in the mouth.

They are perfectly *incorrodible*, and cannot be affected in any way by the saliva, heat of the stomach, or acids of any kind; IN SHORT, THEIR DURABILITY IS UNBOUNDED, AS THEY WILL NEVER DECAY OR BECOME THE LEAST DISCOLORED, AND WILL APPEAR AS WELL AFTER TEN YEARS' WEAR AS THEY DO THE FIRST DAY THEY ARE PLACED IN THE MOUTH.

The author will be happy to show them in

every variety to those who are interested in this subject.

The course of practice as pursued by the author, has secured to him the approbation of the following distinguished gentlemen, whom he is permitted to refer to in Boston:—

J. C. Warren, M.D., Prof. of Anatomy and Surgery, Mass. Med. Col.

Geo. Hayward, M.D., Prof. of the Principles of Surgery and Clinical Surgery, Mass. Med. Col.

L. W. Bell, M.D., Physician to the McLean Asylum.

J. B. Brown, M.D., Orthopedic Surgeon.

A. A. Gould, M.D.

F. M. McLellan, M.D.

Com. Downes, U.S.N.

H. J. Bigelow, Surgeon to the Massachusetts General Hospital.

J. D. Townsend, do.

and numerous other distinguished individuals.

# APPENDIX.

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## GREAT DISCOVERY.

The subscriber having had the happiness to discover, and demonstrate to the world, a means of annihilating pain, was necessarily compelled to relinquish his professional business personally, for a time. Having returned fully to the practical part of his profession, he announces that he has associated with him, Dr. FRANCIS WHITMAN, who has been engaged in his establishment (No. 19, Tremont Row, opposite the Museum) for the last four years, and who will fill the place of Dr. N. C. Keep (vice-president of the American Society of Dental Surgeons), his former instructor and partner.

He would respectfully tender their professional services to the public; and, in so doing, would state that in consequence of the DISCOVERY of the new properties of ether, constant communications are kept up with American and foreign dentists, affording rare opportunities of information in regard to the LATEST IMPROVEMENTS in dentistry, both at home and abroad.

They manufacture and set TEETH IN BLOCKS, with false gums; insert SINGLE TEETH, with or without gums, upon plate or without, from one to a whole set, the latter being inserted upon a method NOT IN GENERAL USE, which they warrant is NOT SURPASSED in beauty or usefulness.

TEETH FILLED, regulated, cleaned, and extracted, and all operations performed WITHOUT PAIN.

Great experience has been had in this establishment

for administering the ether; and having given it for several months, in connection with the

## SURGEONS OF THE MASSACHUSETTS GENERAL HOSPITAL,

who are fully acquainted with the manner it is administered by the subscriber, they are respectfully referred to

W. T. G. MORTON,

Author of "Remarks upon the  
Administration of Ether,"  
"Voice from Europe," &c.

[From the Dublin Quarterly Review.]

Dr. Morton, a dental surgeon at Boston, appears to have been the first to make use of this agent as a means of relieving pain during surgical operations; and he soon acquired great and just celebrity in that city, by extracting teeth without the patients, who had previously inhaled the ether, being conscious of the operation.

[From the Christian Watchman.]

DENTISTRY.—We were much gratified with a visit, a few days ago, to the rooms of Dr. Morton, No. 19, Tremont Row. The toothless are there supplied with complete sets of teeth, inserted on a new principle, and sustained in their place by atmospheric pressure so firmly that several pounds may be raised by them without removing the plate, which is made, as well as the solder, of the best of gold. In this way many persons have been enabled to wear teeth with comfort who had given up all hope of any assistance of this kind.

Dr. Morton has studied the dental art thoroughly, and on strictly scientific principles. He has in his possession the finest anatomical preparations, illustrative of the structure, positions, gradual development, and decay of the teeth, which we have ever seen, imported from Paris, expressly for use.

Dr. Morton has extensive facilities for the preparation and insertion of whole sets of teeth.

[From Prof. Hayward, Mass. Med. College.]

The first successful application of it was made here in September last, by Dr. Morton, a distinguished dentist. To Dr. Morton, I think, must be awarded the credit of being the first who demonstrated, by actual experiment on the human subject, the existence of this wonderful property.

[From the Transcript.]

DENTAL SURGERY.—Without wishing to detract from the merits of any of the regularly-educated Surgeon Dentists of this city, we would call the attention of the public to a scientific gentleman, in whom entire confidence may be reposed, to perform, in an elegant manner, any operation that may come under the cognizance of a Dentist.

[From Prof. J. C. Warren, of Mass. Med. College.]

For its practical application we are indebted to DR. MORTON.

[From the Boston Medical and Surgical Journal.]

IMPROVED DENTISTRY. — Dr. Morton, an ingenious dentist in Tremont Row, in this city, has recently executed some EXTRAORDINARY specimens of dental ingenuity, which makes it a difficult question to decide which LOOKS the best — nature's work or his!

[From the London Lancet.]

Dr. Morton deserves, if his discovery stand the test of time, the gratitude and reward of every civilized people and government upon the face of the earth.

[From the Mail.]

DENTAL SCIENCE. — We saw, a few days since, an entire new set of artificial teeth inserted for a lady, by Dr. Morton, that defied the most critical observer to detect from the original. In the case above referred to, the lady experiences no difficulty whatever in mastication, nor is her speech affected in the slightest degree.

[From the London Lancet.]

The realization of such an object cannot but redound to the great merit and reputation of the discoverer, Dr. Morton, of Boston, America, and to the honor of the profession to which he belongs.

[From the Boston Post.]

Dr. Morton has been particularly successful in contriving gold plates for the support of artificial teeth, and has given the most PERFECT SATISFACTION in some recent operations of a very difficult nature.

[From the Recorder.]

Our minds were directed, a short time since, to a piece of work constituting the whole jaw, teeth and all, in one single piece, being a PERFECT imitation, and which, on being introduced into the mouth, we never should suspect any portion of the individual to be artificial. This ingenious invention and piece of work was executed by Dr. Morton.

[From the Evening Gazette.]

Dr. Morton has made a great improvement in mechanical dentistry. We have seen a whole upper set of teeth, and we consider the style and finish to be a little superior to any we ever saw. They are inserted by a chemical process so firmly to the jaw, that several pounds weight may be attached to the plate, and raised from the floor.

[From the Christian Register.]

The publisher of this paper had an opportunity of witnessing an operation performed by Dr. Morton, which the Transcript gives the following description of:

**DIFFICULT OPERATION.** — Dr. Morton has recently performed a difficult operation upon a young lady, very successfully. The nature of the case, without going into

particulars, was a cleft palate. The operation proved entirely satisfactory to the young lady operated upon, and will enable her to speak and articulate distinctly.

[From the Atlas.]

We lately had an opportunity of examining two beautiful whole sets of artificial teeth, which were set on gold plate of great purity, and soldered with gold of the same degree of firmness, so that no blackening or galvanic effect, or bad taste, can possibly result. This work, we learned, was done to order for a gentleman and his lady, who came hither from Cuba to avail themselves of the skill of Dr. Morton.

[From the Post.]

We are happy to notice a whole set of teeth inserted by Dr. Morton. The upper plate had a 4-lb. weight attached to it and raised from the floor, the plate remaining firm in its place.

[From the Newark Daily Advertiser.]

The exhibition was successful in proving what Dr. Morton claims. To him is the credit due.

[From the Salem Gazette.]

We take pleasure, unsolicited by Dr. Morton, in calling attention to a most important discovery of his, which seems to mark out a new era in the history of our race. We think it will make our physical life in the nineteenth century, of more value than it has ever been before.

[From the Illustrated London News.]

The application is of American origin, and was first introduced, a few months since, by Dr. Morton, a dentist, of Boston, U. S.

[From the Sherbrooke (Con.) Gazette.]

See Dr. Morton's advertisement. Having experienced the benefit of his skill in our family, we can cordially recommend him.

[From the London Lancet.]

The discovery of Dr. Morton, the hitherto unknown dentist of Boston, more striking to the general than to the-scientific mind, will undoubtedly be placed high among the blessings of human knowledge and discovery.

[From Prof. Bigelow, Mass. Med. College.]

The inventor is Dr. Morton, a dentist of this city.

[Foreign Correspondence of the Atlas.]

#### FRANCE.

PARIS, August 16, 1847.

The committee of the INSTITUTE appointed to settle the merit of the discovery of Ether, still has the matter under consideration. Among medical men here with whom I have conversed, the claims of Dr. Morton, as having rendered this precious fluid USEFUL, appear to be recognized.

